

# Citation Searching

## Alternatives to the Web of Science

Dana L. Roth  
Caltech Library System  
[dzrlib@library.caltech.edu](mailto:dzrlib@library.caltech.edu)

SLA Annual Conference – 2008

# The emergence of competitors to the Science Citation Index and the Web of Science

Dana L. Roth

*Current Science* (2005), 89(9),  
1531-1536

# Four Main Database Groups

Multi-subject Comprehensive

Multi-subject Publisher

Subject Specific

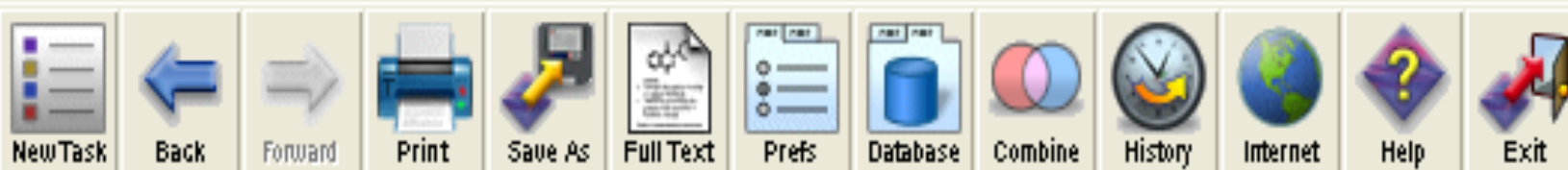
Patent

Multi-subject comprehensive  
databases include:

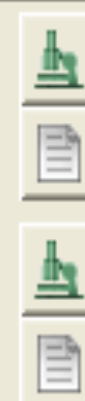
CAplus (thru SciFinder or STN)

Scopus

Google Scholar



- ☒ [Jung, Yousung; Marcus, R. A.](#) **On the Theory of Organic Catalysis "on Water".** Journal of the American Chemical Society (2007), 129(17), 5492-5502. CODEN: JACSAT ISSN:0002-7863. CAN 146:500557 AN 2007:347813 CAPLUS
- ☐ [Jung Yousung; Marcus R A](#) **On the nature of organic catalysis "on water".** Journal of the American Chemical Society (2007), 129(17), 5492-502. Journal code: 7503056. ISSN:0002-7863. PubMed ID 17388592 AN 2007246411 MEDLINE



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On the theory of organic catalysis  
“on water”

Jung, Y., Marcus, R.A. 2007

*J. Amer. Chem. Soc.* 129 (17), 5492-5502



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RA marcus catalysis

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[\[PDF\]](#) [Charge transfer on the nanoscale: current status - all 10 versions »](#)

... M Lieberman, S Lindsay, **RA Marcus**, RM Metzger, ME ... - J. Phys. Chem. B, 2003 - sc.doe.gov  
... Rudolph A. **Marcus**, ▽ Robert M. Metzger, [ ME Michel-Beyerle, Δ John R. Miller ... of  
energy conversion based on photochemistry, **catalysis**, and electrocatalysis ...

[Cited by 148](#) - [Related Articles](#) - [View as HTML](#) - [Web Search](#) - [Caltech Connect](#) - [BI Direct](#)

[\[BOOK\]](#) [Metalloporphyrins in Catalytic Oxidations](#)

**RA Sheldon** - 1994 - books.google.com  
... Ph. D. Senior Principal Scientist, **Catalysis** Technology Division, Research and  
Development Department, Sun Company, Inc., **Marcus** Hook, Pennsylvania Page 13. ...

[Cited by 111](#) - [Related Articles](#) - [Web Search](#) - [Caltech Connect](#)

[\[PDF\]](#) [Oxyl Radical Required for O– O Bond Formation in Synthetic Mn-Catalyst - all 8 versions »](#)

M Lundberg, MRA Blomberg, PEM Siegbahn - Limburg, 1994 - physto.se



Google Scholar

Enzymatic catalysis and transfers in solution.  
Caltech Connect - all 8 versions »

RA **Marcus** - The Journal of Chemical Physics, 2006 - link.aip.org  
Enzymatic **catalysis** and transfers in solution.  
[Journal of Chemical Physics 125, 194504 (2006)]. RA Marcus. ...

Cited by 2 - Related Articles - Web Search - BL Direct

Google Scholar

[On the Theory of Organic Catalysis” on Water – Caltech Connect – all 3 versions »](#)

Y Jung, RA Marcus

J. Amer. Chem. Society, 2007-pubs.acs.org

[Web Search](#)

WoS-18   CA-14   Scopus-14   GS-0

Jacso, P. Online (2008), 32(2), 51-54

# Faculty member' s question

History of electrical aerosol...

*Aerosol Sci Tech* (1998), 28(4), 301-380

Cited 41 times in Google Scholar and only  
37 times in Web of Science?

# Comparison of search results in GS/WoS/Scopus/CAplus:

38 times in Google Scholar

38 times in Web of Science

38 times in Scopus

39 times in CAplus

# Unique Results for the Group (excluding journal articles)

WoS – errata notice

Scopus – none

CAplus – book chapters, arXiv preprint

GS – theses, encyclopedia article, workshop report, IEEE Conference paper

# Multi-Subject Publisher Databases

BioOne

Scitation

HighWire Press

BioMedCentral

Science Direct

# Subject Specific Databases

NASA ADS

CiteSeer

Spire HEP

MathSciNet

# Comparison Search: ADS, WOS, GS

Measurement of [O III] Emission ...  
ASTROPHYS. J. Part 1 (2000), 542(1), 18-26

Total of 33 citing articles:

ADS – 32, four unique ...

WoS – 28, none unique (all in 28 in ADS)

GS – 18, one unique book chapter (17 in ADS, 14 in WoS)



# CiteSeer<sup>x</sup>

Myrinet: A gigabit-per-second local area network  
1995 — IEEE Micro  
Cited by 421 – [Google Scholar 1825]

Bayesian interpolation  
1992 — Neural Computation  
Cited by 316 – [Google Scholar 1187]

# Spires HEP

Precision Measurement of Neutrino Oscillation ...

Feb 2008. 5pp.

e-Print: **arXiv:0801.4589** [hep-ex]

[References](#) | [LaTeX\(US\)](#) | [LaTeX\(EU\)](#) | [Harvmac](#) | [BibTeX](#) | Cited [8 times](#)

[vs 15 in arXiv]

Experimental and theoretical nuclear astrophysics

Apr 1984. 30pp.

Published in **Rev.Mod.Phys.56:149-179,1984.**

[References](#) | [LaTeX\(US\)](#) | [LaTeX\(EU\)](#) | [Harvmac](#) | [BibTeX](#) | Cited [62 times](#)

[vs 166 in NASA ADS, 217 in GS, & 200 in WoS]

J. COSMOL. ASTROPART. PHYS.

Issue: 3      Article Number: 011

Published: MAR 2006

Times Cited: 5

Web of Science	9
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ADS	12
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Spires	10
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Google Scholar	7
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# Patent Databases

Citation Bridge (U.S.)

U.S. PTO

esp@cenet (Worldwide)

Google Patent (U.S.)

CAplus (worldwide-chemistry)

Web of Science (worldwide)

Backward Citations	Patent	Forward Citations
Re-Center Diagram	6280986	Re-Center Diagram
<a href="#"><u>5482846</u></a>	<a href="#"><u>Stabilization of pet operon plasmids ...</u></a>	<a href="#"><u>6682912</u></a>
<a href="#"><u>5424202</u></a>		
<a href="#"><u>5000000</u></a>		

# US 6280986

## References Cited [\[Referenced By\]](#)

### U.S. Patent Documents

<a href="#">5000000</a>	Mar., 1991	Ingram et al.	435/161
<a href="#">5424202</a>	Jun., 1995	Ingram et al.	435/161
<a href="#">5482846</a>	Jan., 1996	Ingram et al.	

**Clicking on [\[Referenced By\]](#) gives:**

United States Patent	6,682,912
Moriya, et al.	January 27, 2004

# esp@cenet

1. EP Database – recent applications
2. WIPO Database – recent applications
3. Worldwide Database – published patents

**esp@cenet**

## **LIST OF CITING DOCUMENTS**

1 document citing **US6280986**

**L-glutamic acid-producing bacterium...**

**Inventor:** MORIYA MIKA (JP);      **Applicant:** AJINOMOTO KK (JP)

**EC:** C12N9/06B1B; C12N9/88;

**IPC:** *C12N9/06*; *C12N9/88*;

**Publication info:** **US2002004231** — **2002-01-10**



Google Patents - Windows Internet Explorer

http://www.google.com/patents?hl=en

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# Google™

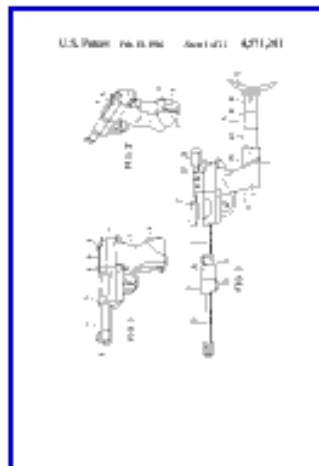
## Patent Search BETA

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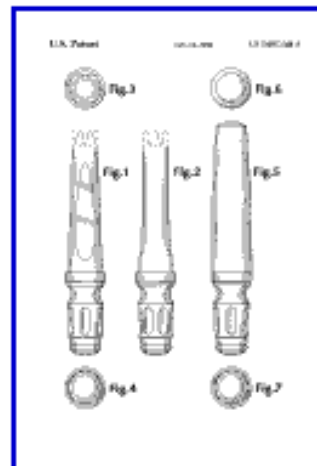
Search over 7 million patents.



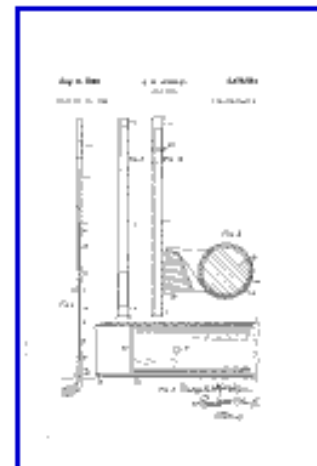
DISPLAY DEVICES



Toy gun convertible into  
robotic-humanoid form



Nose hair trimmer



GOLF CLUB



Advanced state of the art  
movie theater

Comparison Search:  
CB / USPTO / esp / GP

Ethanol production by *E. coli* ...

US Pat. 5000000 – Filed May 15, 1989 – U. Florida

Total of 21 citing patents:

USPTO, GP & CB – 19 (none unique)

esp@cenet – 12 (2 unique WO applications)

# Comparison Search: CAplus / Web of Science

Ethanol production in Gram-positive microbes

US Pat. 5,482,846 – Filed January 9, 1996 – U. Florida

CAplus – 31+13

Ethanol production by *E. coli* ...

US Pat. 5,000,000 – Filed May 15, 1989 – U. Florida

Web of Science – 46+5

# Comparison Search: CAplus / Web of Science

Ethanol production ...

US 5,000,000

US 5,482,846

Total of 31 citing references (1997-2008):

- Web of Science – 24 (with 7 unique)
- CAplus – 31 (with 14 unique)